

JOURNAL OF

# NATURAL HISTORY

INTERNATIONAL JOURNAL OF TAXONOMIC AND GENERAL BIOLOGY

VOLUME 15 1981

*Published by*

TAYLOR & FRANCIS LTD

4 JOHN STREET · LONDON · WC1N 2ET

# JOURNAL OF NATURAL HISTORY

An International Journal of Taxonomic and General Biology

*Edited by*

V. R. SOUTHGATE, British Museum (Natural History), London

D. HOLLIS, British Museum (Natural History), London

and an international panel of specialist consultants

## Subscription Information

*USA, Canada and Mexico* (air freight): annual subscription (payable in advance), \$245.00; per part \$44.00 (surface post paid). Air freight and mailing in the USA by Publications Expediting Inc., 200 Meacham Avenue, Elmont, New York 11003. Second class postage paid at Jamaica, New York 11431. USA Postmaster: Send address changes to *Journal of Natural History*, Publications Expediting Inc., 200 Meacham Avenue, Elmont, New York 11003. US subscribers should send order and cheque (in favour of Taylor & Francis Ltd) to Account 04 810 879 Bankers Trust Company, P.O. Box 9137, Church Street Station, New York, N.Y. 10049.

*Japan* (accelerated surface post): apply to exclusive agents, Kinokuniya Company Ltd, Odakyu West-Shinjuku Building, 47-1 Hatsudai 1-chome, Shibuya-ku, Tokyo 151. Telex 2322535.

*FR Germany* (surface post): annual subscription (payable in advance), DM 372.00; per part DM 66.00. Subscribers in FR Germany should send order and cheque (in favour of Taylor & Francis Ltd) to Account No. 073 6686, Deutsche Bank AG, BLZ 500 700 10, Postfach 2623, Rossmarkt 18, 6000 Frankfurt/Main 1.

*UK and the rest of the world* (surface post; accelerated surface post to Australasia; air freight to India): annual subscription (payable in advance), £85.00; per part £16.00 (surface post paid).

Published bi-monthly by Taylor & Francis Ltd, 4 John Street, London WC1N 2ET, UK. Telex 858540.

Printed by Taylor & Francis (Printers) Ltd, Rankine Road, Basingstoke, Hampshire RG24 0PR, UK.

© 1981 Taylor & Francis Ltd. ISSN 0022-2933.

## CONTENTS OF VOLUME 15

### NUMBER 1—JANUARY—FEBRUARY

	Page
PRICE, A. R. G. Studies on the echinoderm fauna of the western Arabian Gulf.. .. .	1- 15
HAYAT, M. Taxonomic notes on Indian Encyrtidae (Hym.. Chalcidoidea). II.. .. .	17- 29
CARLTON, J. T., and IVERSON, E. W. Biogeography and natural history of <i>Sphaeroma walkeri</i> Stebbing (Crustacea: Isopoda) and its introduction to San Diego Bay, California .. .. .	31-48
NAKAMURA, K. Post embryonic development of a pycnogonid, <i>Propallene longiceps</i> .. .. .	49- 62
JANGI, B. S., and DASS, C. M. S. Redescription of the Indian centipede, <i>Cormocephalus pygmaeus</i> Pocock (Chilopoda: Scolopendromorpha: Scolopendridae) .. .. .	63- 65
BRUCE, N. L., and JONES, D. A. The systematics and ecology of some cirolanid isopods from southern Japan .. .. .	67- 85
CHOWDHURY, V., and PARR, M. J. The 'switch mechanism' and sound production in tsetse flies (Diptera: Glossinidae) .. .. .	87- 95
COOK, P., and CHIMONIDES, P. J. Morphology and systematics of some rooted cheilostome Bryozoa .. .. .	97-134
BATTISH, S. K. Two new species of <i>Centrocypris</i> Vávra, 1895 (Crustacea: Ostracoda) from Punjab, India .. .. .	135-143
KING, P. E., MORGAN, C. I., and FORDY, M. R. The marine flora and fauna of the Isles of Scilly—Tardigrada .. .. .	145-150
PEIRCE, M. A. Haematozoa of British birds. V. Redescription of <i>Haemoproteus majoris</i> (Laveran) from the great tit <i>Parus major</i> ..	151-154
PARRINGTON, F. R. The Tritylodontoidea .. .. .	155-159
FRICKE, R. On a new species of the family Callionymidae ( <i>Pisces</i> , Perciformes, Callionymoidei), <i>Callionymus stigmatopareius</i> sp. nov. from Mozambique .. .. .	161-167
Book Reviews .. .. .	169-178
Notices .. .. .	179-182



## NUMBER 2—MARCH-APRIL

Page

LOWRY, J. K. The amphipod genus <i>Cerapus</i> in New Zealand and subantarctic waters (Corophioidea, Ischyroceridae) . . . . .	183-211
BALLINGER, R. E., and CONGDON, J. D. Population ecology and life history strategy of a Montane Lizard ( <i>Sceloporus scalaris</i> ) in Southeastern Arizona . . . . .	213-222
RUSSELL-SMITH, A. A revision of the genus <i>Chaleposa</i> Simon (Araneae: Lycosidae) . . . . .	223-244
LATIMER, W. Variation in the song of the bush cricket <i>Platycleis albopunctata</i> (Orthoptera, Tettigoniidae) . . . . .	245-263
MANUEL, R. L. On the identity of the sea anemone <i>Scolanthus callimorphys</i> Gosse, 1853 (Actiniaria: Edwardsiidae) . . . . .	265-276
WILLIAMS, J. B. Classification of the Temnocephaloidea (Platyhelminthes) . . . . .	277-299
FRANKEL, B., SUTTON, S. L., and FUSSEY, G. D. The sex ratios of <i>Trichoniscus pusillus</i> Brandt (Crustacea: Oniscoidea) . . . . .	301-307
GREATHEAD, D. J. The <i>Villa</i> group of genera in Africa and Eurasia with a review of the genera comprising <i>Thyridanthrax sensu</i> Bezzi 1924 (Diptera: Bombyliidae) . . . . .	309-326
RAGGE, D. R. A new leaf-resembling genus of bush-cricket from West Africa (Orthoptera: Tettigoniidae) . . . . .	327-330
SHIMURA, S. The larval development of <i>Argulus coregoni</i> Thorell (Crustacea: Branchiura) . . . . .	331-348
Notices . . . . .	349-350
Book Reviews . . . . .	351-364

## NUMBER 3—MAY-JUNE

HODJAT, S. H. Two new aphids (Hemiptera: Aphididae) from Iran and keys to related Middle Eastern species . . . . .	365-374
BLAKE, D. B. A reassessment of the sea-star orders Valvatida and Spinulosida . . . . .	375-394
MOLYNEUX, D. H., CROFT, S. L. and LAVIN, D. R. Studies on the host-parasite relationships of <i>Leptomonas</i> species (Protozoa: Kinetoplastida) of Siphonaptera . . . . .	395-406
SLOAN, N. A. and ALDRIDGE, T. H. Observations on an aggregation of the starfish <i>Asterias rubens</i> L. in Morecambe Bay, Lancashire, England. . . . .	407-418

## Page

PEIRCE, M. A. Distribution and host-parasite check-list of the haematozoa of birds in Western Europe . . . . .	419-458
PEIRCE, M. A. Haematozoa of British birds. VI. Redescription of <i>Haemoproteus laevis</i> Yakunin from the lesser black-backed gull <i>Larus fuscus</i> . . . . .	459-462
WATTS, E. and PETRI, M. A scanning electron microscope study of the thoracic appendages of <i>Daphnia magna</i> Straus . . . . .	463-473
YOUNG, J. O. A serological study of the diet of British, lake-dwelling <i>Glossiphonia complanata</i> (L.) (Hirudinea: Glossiphoniidae) . . . . .	475-489
HODKINSON, I. D., and WHITE, I. M. The Neotropical Psylloidea (Homoptera: Insecta): an annotated check list . . . . .	491-523
OLIVER, P. G., and TREW, A. A new species of <i>Metatrichoniscoides</i> (Crustacea: Isopoda: Oniscoidea) from the coast of South Wales, U.K. . . . .	525-529
Book Reviews . . . . .	531-542
Notice . . . . .	543
Erratum . . . . .	544

---

 NUMBER 4—JULY—AUGUST

DAVIES, A. J. A scanning electron microscope study of the prawn larva of <i>Gnathia maxillaris</i> Montagu (Crustacea, Isopoda, Gnathiidae), with special reference to the mouthparts . . . . .	545-554
HOLDICH, D. M., HARRISON, K., and BRUCE, N. L. Cirolanid isopod crustaceans from the Townsville region of Queensland, Australia, with descriptions of six new species . . . . .	555-605
SHEPPARD, C. R. C. The reef and soft-substrate coral fauna of Chagos, Indian Ocean . . . . .	607-621
DUMONT, J. P. C. A report on the cheilostome Bryozoa of the Sudanese Red Sea . . . . .	623-637
STORK, N. E. The structure and function of the adhesive organs on the antennae of male <i>Harpocera thoracica</i> (Fallen) (Miridae; Hemiptera) . . . . .	639-644
BATTISH, S. K. Freshwater Ostracoda of the subfamily Cyprinotinae from Punjab, India, with the description of eight new species . . . . .	645-669



	Page
DAY, M. C., ELSE, G. R., and MORGAN, D. The most primitive Scoliidæ (Hymenoptera) . . . . .	671-684
FRICKE, R. <i>Diplogrammus</i> ( <i>Climacogrammus</i> ) <i>pygmaeus</i> sp. nov., a new callionymid fish (Pisces, Perciformes, Callionymoidei) from the South Arabian Coast, Northwestern Indian Ocean . . . . .	685-692
BAILEY, W. J., and ROBERTS, J. D. The bioacoustics of the burrowing frog <i>Heleioporus</i> (Leptodactylidae) . . . . .	693-702
HICKMAN, V. V., and HICKMAN, J. L. Observations on the biology of <i>Oncylocotis tasmanicus</i> (Westwood) with descriptions of the immature stages (Hemiptera, Enicocephalidae) . . . . .	703-715
Notice . . . . .	717-718
Book Reviews. . . . .	719-726

---

#### NUMBER 5—SEPTEMBER—OCTOBER

MANN, J. S., and CROWSON, R. A. The systematic positions of <i>Orsodacne</i> Latr. and <i>Syneta</i> Lac. (Coleoptera, Chrysomelidae), in relation to characters of larvae, internal anatomy and tarsal vestiture . . . . .	727-749
JOHNSON, R. A., THOMAS, R. J., WOOD, T. G., and SWIFT, M. J. The inoculation of the fungus comb in newly founded colonies of some species of the Macrotermitinae (Isoptera) from Nigeria . . . . .	751-756
VICTOR, R., and FERNANDO, C. H. Redescription of three cyclocypridine freshwater ostracods (Crustacea, Ostracoda) from Southeast Asia . . . . .	757-768
WHEELER, A., and BADDOKWAYA, A. The generic nomenclature of the marine catfishes usually referred to the genus <i>Arius</i> (Osteichthyes-Siluriformes) . . . . .	769-773
LANE, R. P. Allometry of size in three species of biting midges (Diptera, Ceratopogonidae, <i>Culicoides</i> ) . . . . .	775-788
DEEMING, J. C. A contribution to the study of afrotropical Chloropine Diptera . . . . .	789-828
PARH, I. A., and TAYLOR, T. A. Studies on the life cycle of the cicadellid bug <i>Empoasca dolichi</i> Paoli, in Southern Nigeria . . . . .	829-835
JONES, H. D. A specimen of the Australian land planarian <i>Geoplana sanguinea</i> (Moseley) var. <i>alba</i> (Dendy) from The Isles of Scilly . . . . .	837-843
LUGO, A. E. The inland mangroves of Inagua . . . . .	845-852

## Page

TRAVERS, R. A. The interarcual cartilage; a review of its development, distribution and value as an indicator of phyletic relationships in euteleostean fishes . . . . .	853-871
WRIGHT, C. A., and ROLLINSON, D. Analysis of enzymes in the <i>Bulinus tropicus/truncatus</i> complex (Mollusca: Planorbidae) . . . . .	873-885
Letter to the Editor . . . . .	887
Book Reviews . . . . .	889-906
Notice . . . . .	907

## NUMBER 6—NOVEMBER—DECEMBER

BROWN, D. S. Generic nomenclature of freshwater snails commonly classified in the genus <i>Bulinus</i> (Mollusca: Basommatophora) . . . . .	909-915
GIBSON, D. I., MACKENZIE, K., and COTTLE, J. <i>Halvorsenius exilis</i> gen. et sp. nov., a new didymozoid trematode from the mackerel <i>Scomber scombrus</i> L. . . . .	917-929
SALMAN, S. D. Larval development of <i>Macropodia tenuirostris</i> (Leach) (Crustacea, Brachyura, Majidae), reared in the laboratory . . . . .	931-938
MOORE, P. G. Marine Amphipoda (Crustacea) new to science from the Tasmanian phytal fauna . . . . .	939-964
PEQUEÑO, G. R. The rare fish <i>Neophrynichthys marmoratus</i> Regan 1913, in the southern slope of Chile (Teleostomi, Psychrolutidae) . . . . .	965-970
ADAMS, J. The influence of environment and competition on the distribution of <i>Bdellocephala punctata</i> (Turbellaria, Tricladida) in Britain . . . . .	971-980
SIMONS, M. J., and JONES, M. B. Population and reproductive biology of the mud crab, <i>Macrophthalmus hirtipes</i> (Jacquinot, 1853) (Ocypodidae), from marine and estuarine habitats . . . . .	981-994
RAGGE, D. R. An unusual song-pattern in the <i>Chorthippus mollis</i> group (Orthoptera: Acrididae): local variant or hybrid population? . . . . .	995-1002
RICE, A. L. The megalopa stage in brachyuran crabs. The Podotremata Guinot . . . . .	1003-1011
ROGERS, E. Mating in <i>Wiedemannia</i> (Diptera: Empididae) . . . . .	1013-1018
GRYGIER, M. J. <i>Gorgonolaureus muzikae</i> sp. nov. (Crustacea: Ascothoracida) parasitic on a Hawaiian gorgonian, with special reference to its protandric hermaphroditism . . . . .	1019-1045

	Page
DE CONINCK, E., and COESSENS, R. Life cycle and reproductive pattern of <i>Acrotrichis intermedia</i> (Coleoptera: Ptiliidae) in experimental conditions . . . . .	1047-1055
Book Reviews . . . . .	1057-1078
Notices . . . . .	1079-1080
Index . . . . .	1081-1085